Amendments to the Specification:

Please amend the specification as follows:

Please replace the paragraph 0014 on page 4 of the Specification to read:

More specifically, Enhanced Demultiplexer 200 may examine the incoming packet to determine the packet's destination VNIC (e.g., by examining the Media ~~Address~~ <u>Access</u> Control ("MAC") address and/or Internet Protocol ("IP") address), and once the destination VNIC has been determined, Enhanced Demultiplexer 200 may hand the physical page address to the destination VNIC, i.e., assign the current buffer in DMA Buffer Pool 225 (containing the incoming packet) to the destination VNIC. The destination VNIC may then create a mapping from the next guest physical address in the receive DMA table (i.e., RX Descriptor Table 170 or RX Descriptor Table 175) to the host physical address of the page with the incoming packet (i.e., its current location in DMA Buffer Pool 225).